

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/7/2,850
Source: FWO
Date Processed by STIC: 10/18/04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 10/18/2004

PATENT APPLICATION: US/10/712,850

TIME: 10:33:57

Input Set : A:\Durden-'850US-SeqList.txt

Output Set: N:\CRF4\10182004\J712850.raw

4 <110> APPLICANT: Donald L. Durden
 5 ADVANCED RESEARCH & TECHNOLOGY INSTITUTE
 7 <120> TITLE OF INVENTION: Compositions and Methods for Identifying
 8 Agents Which Modulate PTEN Function and PI-3 Kinase Pathways
 11 <130> FILE REFERENCE: 1857-PO2575US2
 13 <140> CURRENT APPLICATION NUMBER: 10/712,850
 14 <141> CURRENT FILING DATE: 2003-11-13
 17 <150> PRIOR APPLICATION NUMBER: 09/870,379
 18 <151> PRIOR FILING DATE: 2001-05-30
 20 <150> PRIOR APPLICATION NUMBER: 60/274,167
 21 <151> PRIOR FILING DATE: 2001-03-08
 23 <150> PRIOR APPLICATION NUMBER: 60/208,437
 24 <151> PRIOR FILING DATE: 2000-05-30
 26 <160> NUMBER OF SEQ ID NOS: 23
 28 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 31 <210> SEQ ID NO: 1
 32 <211> LENGTH: 1260
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Homo sapiens
 36 <400> SEQUENCE: 1
 37 cttctgccaat ctctctcctc ctttttcttc agccacaggc tcccagacat gacagccatc 60
 38 atcaaagaga tcgttagcag aaacaaaagg agatatcaag aggatggatt cgacttagac 120
 39 ttgacctata tttatccaaa tattattgct atgggatttc ctgcagaaag acttgaaggt 180
 40 gtatacagga acaatattga tgatgtagta aggttttttg attcaaagca taaaaaccat 240
 41 tacaagatat acaatctatg tgctgagaga cattatgaca ccgccaaatt taactgcaga 300
 42 gttgcacagt atccttttga agaccataac ccaccacagc tagaacttat caaaccttc 360
 43 tgtgaagatc ttgaccaatg gctaagtga gatgacaatc atgttgcagc aattcactgt 420
 44 aaagctggaa agggacggac tgggtgaatg atttgtgcat atttattgca tcgggggcaa 480
 45 tttttaaaagg cacaagaggc cctagatttt tatggggaag taaggaccag agacaaaaag 540
 46 ggagtcacaa ttcccagtc gaggcgctat gtatattatt atagctacct gctaaaaaat 600
 47 cacctggatt acagacccgt ggcactgctg tttcacaga tgatgtttga aactattcca 660
 48 atgttcagtg gcggaacttg caatcctcag tttgtggtct gccagctaaa ggtgaagata 720
 49 tattcctcca attcaggacc cgcgcggcgg gaggacaagt tcatgtactt tgagttccct 780
 50 cagccattgc ctgtgtgtgg tgatatcaaa gtagagtctc tccacaaaca gaacaagatg 840
 51 ctcaaaaagg acaaaatgtt tcacttttgg gtaaatacgt tcttcatacc aggaccagag 900
 52 gaaacctcag aaaaagtgg aaatggaagt ctttgtgatc aggaaatcga tagcatttgc 960
 53 agtatagagc gtgcagataa tgacaaggag tatcttgtac tcaccctaac aaaaaacgat 1020
 54 cttgacaaaag caaacaaga caaggccaac cgatacttct ctccaaattt taagggtgaaa 1080
 55 ctatacttta caaaaacagt agaggagcca tcaaatccag aggctagcag ttcaacttct 1140
 56 gtgactccag atgttagtga caatgaacct gatcattata gatattctga caccactgac 1200
 57 tctgatccag agaatgaacc ttttgatgaa gatcagcatt cacaattac aaaagtctga 1260
 60 <210> SEQ ID NO: 2
 61 <211> LENGTH: 403

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```

62 <212> TYPE: PRT
63 <213> ORGANISM: Homo sapiens
65 <400> SEQUENCE: 2
66 Met Thr Ala Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr
67 1 5 10 15
68 Gln Glu Asp Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile
69 20 25 30
70 Ile Ala Met Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn
71 35 40 45
72 Asn Ile Asp Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His
73 50 55 60
74 Tyr Lys Ile Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys
75 65 70 75 80
76 Phe Asn Cys Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro
77 85 90 95
78 Gln Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu
79 100 105 110
80 Ser Glu Asp Asp Asn His Val Ala Ile His Cys Lys Ala Gly Lys
81 115 120 125
82 Gly Arg Thr Gly Val Met Ile Cys Ala Tyr Leu Leu His Arg Gly Lys
83 130 135 140
84 Phe Leu Lys Ala Gln Glu Ala Leu Asp Phe Tyr Gly Glu Val Arg Thr
85 145 150 155 160
86 Arg Asp Lys Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr
87 165 170 175
88 Tyr Tyr Ser Tyr Leu Leu Lys Asn His Leu Asp Tyr Arg Pro Val Ala
89 180 185 190
90 Leu Leu Phe His Lys Met Met Phe Glu Thr Ile Pro Met Phe Ser Gly
91 195 200 205
92 Gly Thr Cys Asn Pro Gln Phe Val Val Cys Gln Leu Lys Val Lys Ile
93 210 215 220
94 Tyr Ser Ser Asn Ser Gly Pro Thr Arg Arg Glu Asp Lys Phe Met Tyr
95 225 230 235 240
96 Phe Glu Phe Pro Gln Pro Leu Pro Val Cys Gly Asp Ile Lys Val Glu
97 245 250 255
98 Phe Phe His Lys Gln Asn Lys Met Leu Lys Lys Asp Lys Met Phe His
99 260 265 270
100 Phe Trp Val Asn Thr Phe Phe Ile Pro Gly Pro Glu Glu Thr Ser Glu
101 275 280 285
102 Lys Val Glu Asn Gly Ser Leu Cys Asp Gln Glu Ile Asp Ser Ile Cys
103 290 295 300
104 Ser Ile Glu Arg Ala Asp Asn Asp Lys Glu Tyr Leu Val Leu Thr Leu
105 305 310 315 320
106 Thr Lys Asn Asp Leu Asp Lys Ala Asn Lys Asp Lys Ala Asn Arg Tyr
107 325 330 335
108 Phe Ser Pro Asn Phe Lys Val Lys Leu Tyr Phe Thr Lys Thr Val Glu
109 340 345 350
110 Glu Pro Ser Asn Pro Glu Ala Ser Ser Thr Ser Val Thr Pro Asp
111 355 360 365

```

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```

112 Val Ser Asp Asn Glu Pro Asp His Tyr Arg Tyr Ser Asp Thr Thr Asp
113      370                      375                      380
114 Ser Asp Pro Glu Asn Glu Pro Phe Asp Glu Asp Gln His Ser Gln Ile
115      385                      390                      395                      400
116 Thr Lys Val

```

119 <210> SEQ ID NO: 3

120 <211> LENGTH: 9

121 <212> TYPE: PRT

122 <213> ORGANISM: Homo sapiens

124 <400> SEQUENCE: 3

125 Asp Leu Asp Leu Thr Tyr Ile Tyr Pro

126 1 5

129 <210> SEQ ID NO: 4

130 <211> LENGTH: 4

131 <212> TYPE: PRT

132 <213> ORGANISM: Homo sapiens

134 <220> FEATURE:

135 <221> NAME/KEY: misc_feature

136 <222> LOCATION: (2)...(3)

137 <223> OTHER INFORMATION: Xaa = Any amino acid

139 <400> SEQUENCE: 4

W--> 140 Tyr Xaa Xaa Pro

141 1

144 <210> SEQ ID NO: 5

145 <211> LENGTH: 5

146 <212> TYPE: PRT

147 <213> ORGANISM: Homo sapiens

149 <400> SEQUENCE: 5

150 Tyr Phe Ser Pro Asn

151 1 5

154 <210> SEQ ID NO: 6

155 <211> LENGTH: 6

156 <212> TYPE: PRT

157 <213> ORGANISM: Homo sapiens

159 <400> SEQUENCE: 6

160 Tyr Leu Val Leu Thr Leu

161 1 5

164 <210> SEQ ID NO: 7

165 <211> LENGTH: 4

166 <212> TYPE: PRT

167 <213> ORGANISM: Homo sapiens

169 <400> SEQUENCE: 7

170 Tyr Ser Tyr Leu

171 1

174 <210> SEQ ID NO: 8

175 <211> LENGTH: 7

176 <212> TYPE: PRT

177 <213> ORGANISM: Homo sapiens

179 <400> SEQUENCE: 8

RAW SEQUENCE LISTING

DATE: 10/18/2004

PATENT APPLICATION: US/10/712,850

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Input Set : A:\Durden-'850US-SeqList.txt

Output Set: N:\CRF4\10182004\J712850.raw

```

180  Tyr Arg Asn Asn Ile Asp Asp
181      1          5
184 <210> SEQ ID NO: 9
185 <211> LENGTH: 8
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 9
190  His Cys Lys Ala Gly Lys Gly Arg
191      1          5
194 <210> SEQ ID NO: 10
195 <211> LENGTH: 6
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 10
200  Asp His Asn Pro Pro Gln
201      1          5
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 9
206 <212> TYPE: PRT
207 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 11
210  His Phe Trp Val Asn Thr Phe Phe Ile
211      1          5
214 <210> SEQ ID NO: 12
215 <211> LENGTH: 13
216 <212> TYPE: PRT
217 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 12
220  Thr Leu Thr Lys Asn Asp Leu Asp Phe Thr Lys Thr Val
221      1          5          10
224 <210> SEQ ID NO: 13
225 <211> LENGTH: 12
226 <212> TYPE: PRT
227 <213> ORGANISM: Homo sapiens
229 <400> SEQUENCE: 13
230  Gly Asp Ile Lys Val Glu Phe Phe Thr Lys Thr Val
231      1          5          10
234 <210> SEQ ID NO: 14
235 <211> LENGTH: 14
236 <212> TYPE: PRT
237 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 14
240  Asp Lys Ala Asn Lys Asp Lys Ala Asn Phe Thr Lys Thr Val
241      1          5          10
244 <210> SEQ ID NO: 15
245 <211> LENGTH: 19
246 <212> TYPE: PRT
247 <213> ORGANISM: Homo sapiens
249 <400> SEQUENCE: 15

```

RAW SEQUENCE LISTING

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Input Set : A:\Durden-'850US-SeqList.txt

Output Set: N:\CRF4\10182004\J712850.raw

```

250  Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr Tyr Tyr Ser
251  1          5          10          15
252  Tyr Leu Leu
255 <210> SEQ ID NO: 16
256 <211> LENGTH: 8
257 <212> TYPE: PRT
258 <213> ORGANISM: Homo sapiens
260 <400> SEQUENCE: 16
261  Arg Tyr Ser Asp Thr Thr Asp Ser
262  1          5
265 <210> SEQ ID NO: 17
266 <211> LENGTH: 11
267 <212> TYPE: PRT
268 <213> ORGANISM: Homo sapiens
270 <400> SEQUENCE: 17
271  Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr
272  1          5          10
275 <210> SEQ ID NO: 18
276 <211> LENGTH: 7
277 <212> TYPE: PRT
278 <213> ORGANISM: Homo sapiens
280 <400> SEQUENCE: 18
281  His Thr Gln Ile Thr Lys Val
282  1          5
285 <210> SEQ ID NO: 19
286 <211> LENGTH: 29
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial Sequence
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Primer
293 <400> SEQUENCE: 19
294  ggggtccacat gacagccatc atcaaagag
297 <210> SEQ ID NO: 20
298 <211> LENGTH: 29
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Primer
305 <400> SEQUENCE: 20
306  ggtctagatc agacttttgt aatttgtga
309 <210> SEQ ID NO: 21
310 <211> LENGTH: 4
311 <212> TYPE: PRT
312 <213> ORGANISM: Homo sapiens
314 <220> FEATURE:
315 <221> NAME/KEY: misc_feature
316 <222> LOCATION: (2)...(3)
317 <223> OTHER INFORMATION: Xaa = Any amino acid
319 <400> SEQUENCE: 21

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/712,850

DATE: 10/18/2004
TIME: 10:33:58

Input Set : A:\Durden-'850US-SeqList.txt
Output Set: N:\CRF4\10182004\J712850.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. ~~2,3~~
Seq#:21; Xaa Pos. ~~2,3~~
Seq#:22; Xaa Pos. 3,4,5,6,7
Seq#:23; Xaa Pos. 3,4,5,6

VERIFICATION SUMMARY

DATE: 10/18/2004

PATENT APPLICATION: US/10/712,850

TIME: 10:33:58

Input Set : A:\Durden-'850US-SeqList.txt

Output Set: N:\CRF4\10182004\J712850.raw

L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:336 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22
L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:352 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
L:353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0